

8 STAFF ACTIVITIES

- **Seminar Program**
- **Awards**
- **Academic Affiliations and Activities**
- **Editorial Activities**
- **Committee and Outside Coordination Activities (National)**
- **Professional Society Activities**
- **Standards Activities**
- **Committee and Outside Coordination Activities (International)**
- **Meetings Organized**
- **Invited Lectures At Major Scientific Meetings**
- **Visiting Scientists**
- **Publications**
- **Publications in Press**
- **Presentations**

SEMINAR PROGRAM

The seminar program at EML serves two purposes: to keep the scientific staff informed of progress in major programs within the Laboratory and on programs in other institutions through visiting scientists. The speakers and topics listed below were presented during 1995.

Mark Kritz, State University of New York at Albany
“Use of Radon to Validate Global Climate Models”
January 25

Jaak Sinnaeve, Commission of the European Communities, Belgium
“The Future of Radiation Protection Research in the European European Community”
February 8

Anton Bayer, Federal Office for Radiation Protection, Germany
“The German Federal Office for Radiation Protection and Its Tasks in the Area of Environmental Monitoring”
April 11

Robert Katz, University of Nebraska
“Theory of Heavy Ion Radio-Biology”
May 8

Jurgen Schmitz, Karlsruhe, Germany
“Radiation Exposure by Radon at Workplaces in Germany”
May 30

Gerry M. Kendall, National Radiological Protection Board, UK
“The UK Radon Programme”
June 12

Nestor Azziz, EML
“Physics Behind TLDs”
October 31

Karen A. Stevenson, EML
“Russian Field Studies”
November 7

AWARDS

Andreas C. George

Plaque presented at 1995 International Radon Symposium, Nashville, Tennessee, September 1995, for contributions to radon measurement technology

Merrill Heit

Certificate of Appreciation from National Science Foundation in recognition of service to the Interagency Arctic Research Policy Committee (IARPC)

Wayne M. Lowder (retired)

Plaque presented at 6th International Symposium on the Natural Radiation Environment, Montreal, Canada, June 1995, for contributions of research in the field of environmental radiation and radioactivity and honoring his co-founding of the series of NRE Symposia begun in 1963

ACADEMIC AFFILIATIONS AND ACTIVITIES

Isabel M. Fisenne

Adjunct Associate Professor, Institute of Environmental Medicine, New York University

Andreas C. George

Member, Thesis Advisory Committee, Rutgers University

Carl V. Gogolak

Lecturer, Harvard University Short Course Program, School of Public Health

Adjunct Lecturer, Physics and Applied Mathematics Department, Polytechnic University

Paul E. Goldhagen

Adjunct Assistant Professor, Center for Radiological Research, Columbia University

Adam R. Hutter

Adjunct Lecturer, City University of New York

Earl O. Knutson

Adjunct Associate Professor, Institute of Environmental Medicine, New York University

Lambros Kromidas

Adjunct Assistant Professor, College of Pharmacy and Allied Health, St. John's University

Member, Thesis Advisory Committee, Pharmacology and Allied Health, St. John's University

Robert Leifer

Member, Thesis Advisory Committee, Chemistry Department, Brooklyn College

Member, Thesis Advisory Committee, Meteorology Department, Rutgers University

Kevin M. Miller

Lecturer, Harvard University Short Course Program, School of Public Health

Vincent C. Negro

Adjunct Assistant Professor, Queensborough Community College

Marcel Reginatto

Adjunct Instructor, The Cooper Union for the Advancement of Science and Art

Keng-Wu Tu

Member, Thesis Advisory Committee, New York University

EDITORIAL ACTIVITIES

The senior staff peer reviewed 30 articles in 1995 in response to requests from editors of many different technical journals, proposals submitted to the Department of Energy, ER and OHER as well as other agencies supporting research.

COMMITTEE AND OUTSIDE COORDINATION ACTIVITIES (NATIONAL)

Harold L. Beck

Scientific Vice-President for Radiation Measurement, National Council on Radiation Protection and Measurements

Chair, National Council on Radiation Protection and Measurements Scientific Committee 93, "Radiation Measurements"

Chair, National Council on Radiation Protection and Measurements Scientific Committee 64-6 on "Surface Soil Contamination"

Andreas C. George

Member, DOE Radiological Control Committee's Subcommittee on Occupational Exposure to Radon

Member, American Waterworks Association's Advisory Committee for the Critical Assessment of Radon Progeny Exposure While Showering with Radon Bearing Water

Carl V. Gogolak

Chair, Environmental and Public Radiation Protection Committee, Council on Ionizing Radiation Measurement and Standards

Member, Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Committee

Merrill Heit

EML Representative to OHER Environmental Sciences Division (ER-74)

Member, DOE-ER Human Subjects Research Working Group

DOE Representative to Interagency Arctic Research Policy Coordinating Committee (IARPC)

Coordinator, DOE-ER Human Subjects Research Database at EML

DOE Advisor to DoD-Office of Naval Research Arctic Research Program

Member, Interagency SERDP EcoRisk Methodology Working Group

Michael J. Johnson

Member, QA Working Group, ASD Programs, DOE/EM-263, Office of Transportation, Emergency Management and Analytical Services, Office of Compliance and Program Coordination

Member, Mixed Analyte Performance Evaluation Program Working Group. DOE/EM-263, Office of Transportation, Emergency Management and Analytical Services, Office of Compliance and Program Coordination

Catherine S. Klusek

Member, QA Working Group, ASD Programs, DOE/EM-263, Office of Transportation, Emergency Management and Analytical Services, Office of Compliance and Program Coordination

Member, Mixed Analyte Performance Evaluation Program Working Group, ASD Programs, DOE/EM-263, Office of Transportation, Emergency Management and Analytical Services, Office of Compliance and Program Coordination

Earl O. Knutson

Member, Air Sampling Instruments Committee of the American Conference of Government Industrial Hygienists

Lambros Kromidas

Coordinator, DOE-ER Human Subjects Research Database at EML

Richard J. Larsen

Chair, Ground Truth Review Team, Report on Peer Review of the Conference on Disarmament, International Monitoring System

Camille G. Marinetti

Secretary, EEO/Federal Women's Program Subcommittee (New York Federal Executive Board)

Coordinator, DOE-ER Human Subjects Research Database at EML

Kevin M. Miller

Organizer, IEEE Short Course, "*In-Situ* Gamma-Ray Spectrometry for Site Characterization," 1995 Nuclear Science Symposium

Organizer, Training Course, "*In-Situ* Gamma-Ray Spectrometry" to NRC Staff and Contractors (February 1995)

Panel Member, CEC/NRC Joint Project on Uncertainty Analysis of Consequence Assessment Programs

Hemant S. Pandya

Member, QA Working Group, ASD Programs, DOE/EM-263, Office of Transportation, Emergency Management and Analytical Services, Office of Compliance and Program Coordination

Karen A. Stevenson

Member, DOE Technical Focus Group for Characterization, Monitoring and Sensor Technologies Crosscutting Program

PROFESSIONAL SOCIETY ACTIVITIES

Carl V. Gogolak

Health Physics Society, President-Elect, Radon Section

Robert Leifer

New York Academy of Sciences: Member, Advisory Committee, Meteorological Section

Vivian Pan

American Geophysical Union, Member, Committee on Public Affairs

American Institute of Physics, Member, Committee on Public Policy

Matthew J. Williamson

Health Physics Society, Secretary, Greater New York Chapter

STANDARDS ACTIVITIES

Isabel M. Fisenne

Member, Committee on Nuclear Fuel Cycle, Task Group on Environmental Methods, ASTM C26.05

Andreas C. George

Member, Radionuclides Task Group, Subcommittee on Indoor Air Quality, ASTM D22.05

Member, Working Group on Performance Specifications for Measurement of Radon in Indoor Air, ANSI N13.34

Michael J. Johnson

Member, Subcommittee on Sampling Methods, ASTM D34.01

Chair, Subcommittee on Screening Methods, ASTM D34.02.06

Member, Subcommittee on Mixed Waste, ASTM D34.09

Member, Subcommittee on Environmental Regulations, ASTM E50.04

Member, Subcommittee on Soil and Rock, ASTM D18.01

Gladys A. Klemic

Member, Working Group, Standard for Environmental Thermoluminescent Dosimeters, ANSI-N13.37

Member, Working Group, Standard for Environmental Dosimetry Performance Criteria for Testing, ANSI-N13.29

Hemant S. Pandya

Member, Subcommittee on Environmental Regulations Performance Standards, ASTM E50.04

Colin G. Sanderson

Chair, Subcommittee on Radiochemical Methods of Analyses for Water and Water Deposits, ASTM D19.04

Member, Subcommittee on Low-Level Environmental Measurement Quality Assessment, ANSI 42.2

COMMITTEE AND OUTSIDE COORDINATION ACTIVITIES (INTERNATIONAL)

Harold L. Beck

United States Delegate, International Electrotechnical Commission (IEC) Technical Committee TC-45, Scientific Committee SC-45B, Member Working Groups B5 and B10

Isabel M. Fisenne

Member, Organizing Committee, International Radon Metrology Program, International Atomic Energy Agency and Commission of the European Communities

Andreas C. George

Member, Organizing Committee, International Radon Metrology Program, International Atomic Energy Agency and Commission of the European Communities

Member, International Atomic Energy Agency Coordinated Research Program for International Radon Metrology Program

Merrill Heit

United States Delegate, International Arctic Monitoring Assessment Program (AMAP), U.S. State Department

Gladys A. Klemic

Corresponding Member, European Radiation Dosimetry Group (EURADOS), Working Group 12 on "Environmental Radiation Monitoring"

Co-Chair, Environmental Monitoring Session, 11th Solid State Dosimetry Conference, Budapest, Hungary (July 10-14, 1995)

Catherine S. Klusek

Member, Research Coordination Group, International Atomic Energy Agency, Research Program on Rapid Instrumental and Separation Methods for Monitoring Radionuclides in Food and Environmental Samples

Member, Research Coordination Group, International Atomic Energy Agency, Research Program on Development and Selection of Analytical Techniques for Measuring Accidentally Released Radionuclides in the Environment

Earl O. Knutson

Member, Organizing Committee, International Radon Metrology Program, International Atomic Energy Agency and Commission of the European Communities

Member, Fuchs Memorial Award Committee, International Aerosol Research Assembly

Philip W. Krey

Member, Principals' Committee, Global Atmospheric Watch

Kevin M. Miller

Member, Report Committee on *In Situ* Gamma Spectrometry, International Commission on Radiation Units and Measurements

Colin G. Sanderson

Member, International Committee for Radionuclide Metrology, Low-Level Measurements Techniques

Karen A. Stevenson

Federal Lead, Program of Joint Russian-American Field Studies (DOE/EM)

U.S. Delegate, Committee to develop International Atomic Energy Agency technical document, "Guidance on the Characterization of Radioactively Contaminated Sites"

MEETINGS ORGANIZED

Harold L. Beck

Program Committee, 31st Annual Meeting of the National Council on Radiation Protection and Measurements, April 12-13, 1995, Arlington, Virginia

Adam R. Hutter

State-of-the-Art in Measuring Soil Gas Radon and Radon Exhalation From Soil, June 12-15, 1995, EML, New York

Earl O. Knutson

State-of-the-Art in Measuring Soil Gas Radon and Radon Exhalation From Soil, June 12-15, 1995, EML, New York

INVITED LECTURES AT MAJOR SCIENTIFIC MEETINGS

Harold L. Beck

"Reconstructing Source Terms from Environmental Data" presented at the 31st Annual Meeting of the National Council on Radiation Protection and Measurements, Arlington, Virginia (April 12-13, 1995)

Andreas C. George

"Technical Keynote Address" presented at 1995 International Radon Symposium, Nashville, Tennessee (September 27-29, 1995)

Adam R. Hutter

"Radon Soil Gas Measurements" presented at the International Radon Symposium, Nashville, Tennessee (September 27-29, 1995)

Philip W. Krey

"EML's Role as the Calibration Facility for Radioactivity in the Quality Assurance Program/Science Activity Center for the Americas" presented at the Global Atmospheric Watch Workshop, Garmish-Partenkirchen, Germany (March 13-17, 1995)

"EML's Global Network and Planned Role in GAW" presented at the World Meteorological Organization-International Global Atmospheric Chemistry (WMO-IGAC) Conference on the Measurement and Assessment of Atmospheric Composition Change, Beijing, People's Republic of China (October 9-14, 1995)

VISITING SCIENTISTS

As always, EML received a great many official visitors from all corners of the world, generally for periods of just a day or two. The following individuals worked/trained at EML for longer periods:

Tser-Min Chang

Institute of Nuclear Energy Research, Taiwan

Amaal Ahmed Tawfik

Atomic Energy Authority, Egypt

Tae-Soon Park

Korea Research Institute of Standards and Science, Seoul, Korea

Nathalie Korikian (student)

National Institute of Applied Sciences, France

EML PUBLICATIONS

1/01/95 - 12/31/95

1. Albert, B.
"Light Experimental Aircraft Aerosol Measurement Package"
USDOE Report EML-573, November, 1995

Azziz, N. : See No.(s)24
2. Beasley, T. M.
"The Inventory of Site-Derived Chlorine-36 in the Snake River Plain
Aquifer, Idaho National Engineering Laboratory, Idaho"
USDOE Report EML-567, February, 1995

Beck, H. L. : See No.(s)22
3. Berne, A.
"Use of EIChroM TRU.Spec in the Determination of Americium, Plutonium and
Uranium in Air Filters and Water Samples"
USDOE Report EML-575, December, 1995

Chieco, N. A. : See No.(s)22
4. Colle, R., M. P. Unterweger, P. A. Hodge, J. M. Hutchinson,
S. Whittlestone, G. Polian, B. Ardouin, J. G. Kay, J. P. Friend,
B. W. Blomquist, W. Nadler, T. T. Dang, R. J. Larsen and A. R. Hutter
"An International Intercomparison of Marine Atmospheric Radon 222
Measurements in Bermuda"
J. Geophys. Res., Vol. 100, pp. 617-638, August, 1995
5. Fisenne, I. M., A. C. George, P. M. Perry and H. W. Keller
"The April 1994 and October 1994 Radon Intercomparisons at EML"
USDOE Report EML-568, October, 1995

Fisenne, I. M. : See also No.(s)9
6. Forman, L., R. J. Larsen and R. Perkins

"Ground Truth Review"

Report on the Peer Review of the Conf. on Disarm. International Monitoring System, Expert Group Report CD/NTB/WP.224. U. S. Department of Energy, August, 1995

7. George, A. C., K. W. Tu and E. O. Knutson
"Intercomparison of Active and Passive Instruments for Radon and Radon Progeny in North America"
USDOE Report EML-566, February, 1995
8. George, A. C., K. W. Tu and E. O. Knutson
"Third Intercomparison of Instruments and Methods for Measuring Radon and Radon Progeny in Indoor Air"
L. Morawska, N. D. Bofinger, M. Maroni (Editors)
Indoor Air - An Integrated Approach, Elsevier Scienc Ltd., pp. 149-152, September, 1995
9. George, A. C., E. O. Knutson, K. W. Tu and I. M. Fisenne
"Intercomparison of Active, Passive and Continuous Instruments for Radon and Radon Progeny"
USDOE Report EML-577, December, 1995

George, A. C. : See also No.(s)5

10. Gogolak, C. V., A. M. Huffert and G. E. Powers
"A Nonparametric Statistical Methodology for the Design and Analysis of Final Status Decommissioning Surveys"
Draft U. S. Nuclear Regulatory Commission Report NUREG-1505, August, 1995

Goldhagen, P. : See No.(s)24, 39

Greenlaw, P. : See No.(s)34, 35

11. Gubala, C. P., D. H. Landers, M. Monetti, M. Heit, T. Wade, B. Lasorsa and S. Allen-Gil
"The Rates of Accumulation and Chronologies of Atmospherically Derived
Pollutants in Arctic Alaska, USA"
Science Total Environ., Vol. 161, pp. 347-361, January, 1995

Guggenheim, S. F. : See No.(s)30

Hajnal, F. : See No.(s)24, 38, 39

12. Huffert, A. M. and K. M. Miller
"Measurement Methods for Radiological Surveys in Support of New
Decommissioning Criteria"
Draft U. S. Nuclear Regulatory Commission Report NUREG-1506, August, 1995
13. Hutter, A. R.
"A Method for Determining Soil Gas Rn-220 (Thoron) Concentrations"
Health Physics, Vol. 68, pp. 835-839, June, 1995
14. Hutter, A. R.
"Seasonal Variations in the Radon-222 Flux to the Atmosphere"
EOS, Vol. 76, pg. 76, July, 1995
15. Hutter, A. R., R. J. Larsen, H. Maring and J. T. Merrill
"Radon-222 at Bermuda and Mauna Loa: Local and Distant Sources"
J. Radioanalytical and Nuclear Chemistry, Vol. 193, pp. 309-318, June, 1995

Hutter, A. R. : See also No.(s)4

16. Johnson, M.
"Selection and Use of Equipment for the Sampling of Liquids"
USDOE Report EML-574, November, 1995
17. Johnson, M., C. S. Klusek, V. Pan, H. Pandya and J. May
"EM-263 Assessment Program Training Course"
USDOE Report EML-570, June, 1995

Kada, J. : See No.(s)27

18. Klemic, G.
"USDOE's International Intercomparisons of Environmental Dosimeters"
Appl. Radiat. Isot., Vol. 46, pp. 515-516, August, 1995
19. Klemic, G., J. Shobe, T. Gesell and P. Shebell
"Results of the Tenth International Intercomparison of Environmental Dosemeters"
Radiation Protection Dosimetry, Vol. 58, pp. 133-142, February, 1995

Klusek, C. S. : See No.(s)17, 23

Knuth, R. H. : See No.(s)30

20. Knutson, E. O.
"Random and Systematic Errors in the Graded Screen Technique for Measuring the Diffusion Coefficient of Radon Decay Products"
J. Aerosol Sci., Vol. 23, pp. 301-310, August, 1995
21. Knutson, E. O. and P. J. Lioy
"Measurement and Presentation of Aerosol Size Distributions"
B. S. Cohen, S. V. Hering (Editors)
Air Sampling Instruments for Evaluation of Atmospheric Contaminants, 8th Edition,
ACGIH, Cincinnati, Ohio, June, 1995

Knutson, E. O. : See also No.(s)7, 8, 9

22. Krey, P. W. and H. L. Beck
"EML Annual Report - Calendar Year 1994"
N. A. Chieco (Editor)
USDOE Report EML-571, August, 1995
23. Krey, P. W. and C. S. Klusek
"Soil Sampling in Complex Terrain"
J. Radioanalytical Nucl. Chem., Vol. 197, pp. 79-98, November, 1995
24. Kugel, H. W., G. Ascione, S. Elwood, J. Gilbert, L. P. Ku, J. Levine, K. Rule, N. Azziz,

- P. Goldhagen, F. Hajnal and P. Shebell
"Measurements of TFTR D-T Radiation Shielding Efficiency"
Fusion Engineering and Design, Vol. 28, pp. 534-544, September, 1995
25. Landers, D. H., J. Ford, C. Gubala, M. Monetti, B. K. Lasorsa and J. Martinson
"Mercury in Vegetation and Lake Sediments from the U. S. Arctic"
Water, Air, Soil Pollution, Vol. 80, pp. 591-601, September, 1995
26. Larsen, R. J. and C. G. Sanderson
"Radionuclide Results in Air Filter Samples, 1992"
A. L. Dick, P. J. Fraser (Editors)
Commonwealth Scientific and Industrial Research Organization, Cape Grim Baseline Air
Pollution Station, Baseline '92, December, 1995
27. Larsen, R. J., C. G. Sanderson and J. Kada
"EML Surface Air Sampling Program 1990-1993 Data"
USDOE Report EML-572, November, 1995
- Larsen, R. J. : See also No.(s)4, 6, 15
28. Lee, H. N.
"A Transport and Diffusion Model Using the Semi-Lagrangian Technique with the
Spectral Method"
11th Symposium on Boundary Layers and Turbulence, American Meteorological Society,
Boston, MA, pp. 176-178, April, 1995
29. Lee, H. N. and J. Feichter
"An Intercomparison of Wet Precipitation Scavenging Schemes and the Emission Rates
of Radon-222 for the Simulation of Global Transport and Deposition of Lead-210"
J. Geophysical Research, Vol. 100, pp. 253-270, November, 1995
- Lee, H. N. : See also No.(s)30

30. Leifer, R., R. H. Knuth, S. F. Guggenheim and H. N. Lee
"Design of the Aerosol Manifold for the Southern Great Plains Site"
Proceedings of the Fourth Atmospheric Radiation Measurement (ARM) Science Team
Meeting, pp. 227-231, April, 1995

31. Maiello, M. L., J. F. Gulbin, G. de Planque and H. T. Heaton
"Ninth International (Mini) Intercomparison of Environmental Dosemeters"
Radiation Protection Dosimetry, Vol. 58, pp. 167-175, February, 1995

May, J. : See No.(s)17

32. Miller, K. M. and P. Shebell
"In Situ Gamma-Ray Spectrometry - A Tutorial for Environmental Radiation Scientists"
USDOE Report EML-557, October, 1995

Miller, K. M. : See also No.(s)12

Monetti, M.: See No.(s)25

33. Pan, V.
"Analysis of EML QAP Data from 1982-1992: Determination of Operational Criteria and
Control Limits for Future PE Purposes"
USDOE Report EML-564, January, 1995

Pan, V. : See also No.(s)17, 34, 35

Pandya, H. : See No.(s)17

Perry, P. M. : See No.(s)5

Reginatto, M. : See No.(s)38, 39

34. Sanderson, C. G., P. Greenlaw and V. Pan
"Semi-Annual Report of the Department of Energy, Office of Environmental
Management, Quality Assessment Program"
USDOE Report EML-565, January, 1995

35. Sanderson, C. G., V. Pan and P. Greenlaw
"Semi-Annual Report of the Department of Energy, Office of Environmental
Management, Quality Assessment Program"
USDOE Report EML-569, July, 1995

Sanderson, C. G. : See also No.(s)26, 27

36. Scarpitta, S.
"A Theoretical Model for Radon-222 Adsorption on Activated Charcoal Canisters in
Humid Air Based on the Polanyi Potential Theory"
Health Physics, Vol. 68, pp. 332-339, March, 1995

Shebell, P.: See No.(s)19, 24, 32

Stevenson, K. : See No.(s)40

37. Stevenson, K. A.
"Site Characterization at Low Radiation Levels"
S. Slate, R. Baker, G. Benda (Editors)
Fifth International Conference on Radioactive Waste Management and
Environmental Remediation ICEM'95, Vol. 2, pp. 1597-1599, September, 1995

Tu, K. W. : See No.(s)7, 8, 9

38. Wilson, J. W., M. Reginatto, F. Hajnal and S. Y. Chun
"Calculation of Dose, Dose Equivalent, and Relative Biological Effectiveness for High
Charge and Energy Ion Beams"
Health Phys., Vol. 68, pp. 532-538, April, 1995

39. Wilson, J. W., J. E. Nealy, F. A. Cucinotta, J. L. Shinn, F. Hajnal, M. Reginatto and P. Goldhagen
"Radiation Safety Aspects of Commercial High-Speed Flight Transportation"
NASA Technical Paper 3524, May, 1995

40. Wollenberg, H., C. Tsang, W. Frangos, R. Solbau, W. M. Lowder, K. Stevenson, M. Foley, E. Drozhko, G. Romanov, Y. Glagolenko, A. Posochov, Y. Yvanov, P. A. Mayak, L. Samsonova, A. Petrov, S. Ter-Saakian, N. Vasil'kova, A. Glagolev and P. Hydrospezgeologia
"A Joint Russian-American Field Test at the Chelyabinsk-65 (Mayak) Site: Test Description and Preliminary Results"
S. Slate, R. Baker, G. Benda (Editors)
Fifth International Conference on Radioactive Waste Management and Environmental Remediation ICEM '95, Vol. 2, pp. 1381-1386, September, 1995

EML PUBLICATIONS IN PRESS

Beck , H. L.

“Reconstruction of Source Term from Environmental Measurements”
NCRP Annual Meeting Proceedings

Cavallo, A., K. Gadsby and T. A. Reddy

“Comparison of Natural and Forced Ventilation for Radon Mitigation in Houses”
Environment International

Colle, R., M. P. Unterweger, J. M. R. Hutchinson, S. Whittlestone, G. Polian, B. Ardouin,
J. G. Kay, J. P. Friend, B. W. Blomquist, W. Nadler, T. T. Dang, R. J. Larsen and
A. R. Hutter

“An International Marine-Atmospheric ^{222}Rn Measurement Intercomparison: Part II: Results
for the Participating Laboratories”
NIST Journal of Research.

Fisenne, I. M.

“A USDOE Remediation Site Case Study”
Environment International

Fisenne, I. M.

“Quality Assurance Procedures and Requirements for the Operational of an Environmental
Radiological Measurements Performance Evaluation Program”
NIST: Workshop on Measurement Quality Assurance for Ionizing Radiation

Fisenne, I. M. and H. W. Keller

“Continuous Indoor and Outdoor Measurements of ^{222}Rn in New York City”
Environment International

Fisenne, I. M., H. W. Keller and E. W. Keller

“ ^{210}Pb in Air of a Residence”
Health Physics

George, A. C.

“State-of-the-Art Instruments for Measuring Radon/ Thoron and Their Progeny in Dwellings
-- A Review”
Health Physics

George, A. C., E. O. Knutson, K. W. Tu and I. M. Fisenne

“Intercomparison of Active, Passive and Continuous Instruments for Radon and Radon
Progeny”
USDOE Report EML-577

Hutter, A. R.

“Spatial and Temporal Variations of Soil Gas ^{220}Rn and ^{222}Rn at Two Sites in New Jersey”
Environment International

Hutter, A. R.

“Determination of ^{222}Rn Content of the Atmosphere”

J. Lodge (Editor)

Air Sampling

Klemic, G., N. Azziz and S. Marino

“The Neutron Response of $\text{Al}_2\text{O}_3:\text{C}$, $^7\text{LiF:Mg}$, Cu , P , and $^7\text{LiF:Mg}$, Ti TLDs”

Radiation Protection Dosimetry

Knutson, E. O. and K. W. Tu

“Size Distribution of Radon Progeny Aerosol in the Working Area of a Dry Former Uranium Mine”

Environment International

Kromidas, L. and R. L. Leifer

“An Innovative Application of a Commercially Available Double-Sided Adhesive for the Collection of Aerosols by Impaction”

Atmospheric Environment

Lagomarsino, R. J.

“An Improved Gas Chromatographic Method for the Determination of Perfluorocarbon Tracers in the Atmosphere”

Journal of Chromatographic Science

Leifer, R., L. Kromidas, R. H. Knuth and H. N. Lee

“Vertical Profile (to 20 km) of Aerosol at Alamogordo, NM, Obtained with a New Balloon-Borne Sampler”

Atmospheric Environment

Leifer, R., B. Albert, H. N. Lee, R. H. Knuth, S. F. Guggenheim and L. Kromidas

“Aerosol Measurements at 60 m During the April 1994 Remote Cloud Study Intensive Operating Period (RSC/IOP)”

Proceedings of the 1995 Atmospheric Radiation Measurement (ARM) Science Team Meeting

Leifer, R., R. H. Knuth, S. F. Guggenheim, and B. Albert

“Aerosol Measurements at the Southern Great Plains Site: Design and Surface Installation”

Proceedings of the 1995 Atmospheric Radiation Measurement (ARM) Science Team Meeting

- Monetti, M. A.
“Worldwide Deposition of ^{90}Sr Through 1990”
USDOE Report EML-579
- Pan, V. and K. A. Stevenson
“Temporal Variation Analysis of Plutonium Baseline Concentration in Surface Air from
Selected Sites in the Continental United States”
J. Environmental Radioactivity
- Park, T. S. and E. O. Knutson
“Evaluation of Radon Progeny Sampler Efficiency”
Radiation Protection Dosimetry
- Reginatto, M., P. Shebell and K. M. Miller
“An Application of the Maximum Entropy Method for Assessments of Residual
Radioactivity at Contaminated Sites”
IEEE Trans. Nucl. Sci., 1995 NSS/MIC Conference Issue
- Sanderson, C. G. and P. Greenlaw
“Semi-Annual Report of the Department of Energy, Office of Environmental
Management, Quality Assessment Program”
USDOE Report EML-576
- Scarpitta, S. C.
“A New Beaded Carbon Molecular Sieve Sorbent for ^{222}Rn Monitoring”
Health Physics
- Scarpitta, S. C. and I. M. Fisenne
“Cerenkov Counting as a Complement to Liquid Scintillation Counting”
Int. J. Appl. Rad. Isotopes
- Shebell, P. and K. M. Miller
“Analysis of Eighteen Years of Environmental Radiation Monitoring Data”
Environment International
- Stevenson, K. A. and V. Pan
“An Assessment of Uranium in Surface Air Within the Continental United States”
J. of Environmental Radioactivity
- Tan, Y. L., A. Kong, and M. A. Monetti
“Biogenic Polycyclic Aromatic Hydrocarbons in an Alaskan Arctic Lake Sediment”
Polycyclic Aromatic Compounds

EML PRESENTATIONS

1/01/95 - 12/31/95

Beck, H. L.

"Reconstructing Source Terms from Environmental Data"

Thirty-First Annual Meeting of the NCRP, Arlington, VA, April 12, 1995

Berne, A.

"Americium Separation in Larger Soil Samples (up to 50 g)"

Eichrom Industries, Inc. Annual User's Workshop at the 41st Conference on Bioassay, Analytical, and Environmental Radiochemistry, Boston, MA, November 13, 1995

Berne, A. and H. Eng

"An Analysis of Total Propagated Uncertainties in Analytical Radioactive Measurements of Environmental Samples"

41st Annual Conference on Bioassay, Analytical, and Environmental Radiochemistry, Boston, MA, November 14, 1995

Bogen, D. C.

"Radiochemistry Applications"

On Site Analysis, The Energy Daily and Environment Week, Crystal City, VA, March 20, 1995

Cavallo, A., K. Gadsby and T. A. Reddy

"Comparison of Natural and Forced Ventilation for Radon Mitigation in Houses"

International Symposium on the Natural Radiation Environment VI, Montreal, Canada, June 8, 1995

Fisenne, I. M.

"Continuous Indoor and Outdoor Radon-222 Measurements: A City as a Source"

International Symposium on the Natural Radiation Environment VI, Montreal, Canada, June 5, 1995

George, A. C.

"Performance and Intercomparison of Different Instruments for the Measurement of Radon and Radon Progeny"

1995 International Radon Symposium, American Association of Radon Scientists and Technologists, Nashville, TN, September 26, 1995

Gogolak, C. V.

"Methodology for Determining Whether Residual Radioactivity is Distinguishable from Background"

40th Annual Meeting of the Health Physics Society, Boston, MA, July 23, 1995

Gogolak, C. V.

"Council on Ionizing Radiation Measurements and Standards (CIRMS)"

40th Annual Meeting of the Health Physics Society, Boston, MA, July 23, 1995

Goldhagen, P.

"Radiation Safety for Future High Altitude Aircraft"

NASA Sponsored Sixth Annual Space Radiation Health Investigator's Workshop,
Brookhaven National Laboratory, Upton, NY, May 3, 1995

Goldhagen, P.

"Neutron Spectrometry for Radiation Protection: Three Examples"

Fourth Annual Meeting of the Council on Ionizing Radiation Measurements and
Standards (CIRMS), National Institute of Standards and Technology, Gaithersburg,
MD, November 29, 1995

Goldhagen, P., F. Hajnal, M. Reginatto, J. W. Wilson and J. E. Nealy

"Radiation Safety for Future High-Altitude Commercial Aircraft"

Sixth Annual Space Radiation Health Investigators' Workshop, Brookhaven National
Laboratory, Upton, NY, May 2, 1995

Hutter, A. R.

"Seasonal Variations in the Radon-222 Flux to the Atmosphere"

1995 Spring Meeting of the American Geophysical Union, Baltimore, MD, June 2, 1995

Hutter, A. R.

"Spatial and Temporal Variations of Soil Gas Radon-220 and Radon-222 at Two Sites in
New Jersey"

International Symposium on the Natural Radiation Environment VI, Montreal, Canada,
June 5, 1995

Hutter, A. R.

"Invited talk: Radon-222 + Radon-220 Soil Gas Measurements"

International Radon Symposium, American Association of Radon Scientists and
Technologists, Nashville, TN, September 28, 1995

Johnson, M. J.

"Performance Objectives and Criteria for Field Sampling Assessments"

11th Annual Waste Testing and Quality Assurance Symposium, USEPA Offices of Solid
Waste and Research and Development, Washington, D.C., July 23, 1995

Klemic, G. A.

"Invited talk: International Intercomparison of Environmental Dosimeters"

1995 Radiological Environmental Monitoring Program/Radiological Effluent Technical Specifications (REMP/RETS) Workshop, Mount Pocono, PA, June 5, 1995

Klemic, G. A., N. J. Azziz and S. Marino

"The Neutron Response of $\text{Al}_2\text{O}_3:\text{C}$, $^7\text{LiF,Mg,Cu,P}$, and $^7\text{LiF,Mg,Ti}$ TLDs"

11th Solid State Dosimetry Conference in Budapest, Hungary, July 10, 1995

Klemic, G. A.

"Invited talk: "Scientific Programs of EML"

Centro De Investigaciones Energeticas, Medioambientales Y Tecnologicas (CIEMAT), Madrid, Spain, July 17, 1995

Klemic, G. A.

"Overview of Research and Programs at EML"

USDOE Brookhaven Area Office, Upton, NY, August 31, 1995

Klusek, C. S.

"DOE Quality Assessment Program Using Performance Evaluation Data as a Management Tool"

Fall 1995 Sample Management Office Workshop, Augusta, GA, October 25, 1995

Klusek, C. S.

"DOE QAP - An Environmental Radiological Performance Evaluation Program"

Workshop on the DOE Mixed Analyte Performance Evaluation Program (MAPEP), Augusta, GA, October 26, 1995

Knutson, E. O.

"EML's Radon Calibration Facilities and Quality Assurance Measures"

Workshop on Monitoring and Uranium Mines, Atomic Energy Control Board of Canada, Saskatoon, Saskatchewan, September 20, 1995

Krey, P. W.

"EML's Global Network and Planned Role in GAW"

WMO-IGAC Conference on the Measurement and Assessment of Atmospheric Composition Change in Beijing, People's Republic of China, October 10, 1995

Larsen, R. J.

"EML's Global Sampling Network"

1995 Monitoring Technologies Conference Sponsored by the Advanced Research Projects Agency, Chantilly, VA, May 15, 1995

Lee, H. N.

"Modeling Technique of the Semi-Lagrangian Technique Coupled with the Spectral Method for Studying Pollutant Transport, Diffusion and Chemistry"
Seminar at the Pacific Northwest Laboratory, Richland, WA, February 9, 1995

Lee, H. N.

"Global Transport of Radon-222 and Lead-210 Using Data from EML's Global Sampling Network"
Workshop on Modeling the Global Transport and Scavenging of Tracer Constituents by Clouds, Cambridge University, United Kingdom, August 3, 1995

Leifer, R. and R. H. Knuth

"Aerosol Measurements at the Southern Great Plains Site: Design and Surface Installation"
Fifth Annual Atmospheric Radiation Measurement (ARM) Program Science Team Meeting, San Diego, CA, March 20, 1995

Leifer, R. and R. H. Knuth

"Aerosol Measurements at 60 m During the April 1994 Remote Cloud Study Intensive Operating Period (RSC/IOP)"
Fifth Annual Atmospheric Radiation Measurement (ARM) Program Science Team Meeting, San Diego, CA, March 22, 1995

Miller, K. M. and P. Schebell

"*In Situ* Gamma-Ray Spectrometry"
Training Course for NRC and Contractor Staff Nuclear Regulatory Commission, Rockville, MD, February 2, 1995

Miller, K. M.

"Deposited Materials and Related Doses"
Elicitation Session, USNRC/CEC Consequence Uncertainty Project Albuquerque, NM, July 20, 1995

Miller, K. M.

"Field Measurement Methods to Support Cleanup Criteria That Approach Background Radiation Levels"
40th Annual Meeting of the Health Physics Society, Boston, MA, July 23, 1995

Miller, K. M.

"Surveys and Instrumentation"
Workshop on Development of Regulatory Guidance Implementing the Final Rule on Radiological Criteria for Decommissioning, Nuclear Regulatory Commission, Rockville, MD, September 29, 1995

Miller, K. M., P. Schebell and M. Reginatto

"*In Situ* Gamma-Ray Spectrometry for Site Characterization"

IEEE Nuclear Science Symposium, San Francisco, CA, October 25, 1995

Pan, V. and P. Greenlaw

"U. S. Department of Energy Radiological Laboratory Performance Evaluation Reports:
A Management Tool for Assessing Analytical Capability"

Environmental Remediation 1995 Conference, Denver, CO, August 14, 1995

Pan, V. and W. R. Newberry

"U. S. Department of Energy Environmental Sampling and Analysis Quality Assurance
Assessments"

Environmental Remediation 1995 Conference, Denver, CO, August 15, 1995

Pan, V.

"Determination of Control Limits for Analytical Performance Evaluation in USDOE's
Radiological Quality Assessment Program"

11th Annual Waste Testing and Quality Assurance Symposium, USEPA Offices of Solid
Waste and Research and Development, Washington, D.C., July 23, 1995

Pan, V., C. S. Klusek and W. R. Newberry

"Quality Assurance Assessments for Environmental Sampling and Analysis"

11th Annual Waste Testing and Quality Assurance Symposium, USEPA Offices of Solid
Waste and Research and Development, Washington, D.C., July 23, 1995

Reginatto, M. , P. Shebell and K. M. Miller

"An Application of the Maximum Entropy Method for Assessments of Residual
Radioactivity at Contaminated Sites"

1995 IEEE Nuclear Science Symposium and Medical Imaging Conference, San
Francisco, CA, October 26, 1995

Sanderson, C. G.

"Automatic Remote Gamma-Ray Spectrometry with Two-Way Communications"

1995 Monitoring Technologies Conference sponsored by the Advanced Research Projects
Agency, Chantilly, VA, May 15, 1995

Sanderson, C. G.

"Automatic Remote Gamma-Ray Spectrometry with Two-way Communications"

ARPA Sponsored 1995 Monitoring Technologies Conference, Westfields International
Conference Center, Chantilly, VA, May 18, 1995

Sanderson, C. G.

"Remote Atmospheric Gamma-Ray Spectrometry"

1995 Annual Meeting of the New England Chapter of the Health Physics Society,
Westborough, MA, June 5, 1995

Sanderson, C. G.

"EML's AUTORAMP Aerosol Sampler"

ARPA Sponsored Global Atmospheric Radionuclide Detection System (GARDS)

Technology Demonstration and CTBT Radionuclide Monitoring Workshop,

International Data Center, Arlington, VA, November 16, 1995

Scarpitta, S. C.

"Cerenkov Counting of Environmental Radioactive Samples"

Canberra/Packard Users Group Meeting, Haines City, FL, April 4, 1995

Scarpitta, S. C. and N. Krikorian

"Extraction Efficiencies of Ra, Pb, U, Th, Pu, Am, Cm and Np by PERALS Spectrometry
Using Three Commercially Available Scintillators"

41st Conference on Bioassay, Analytical, and Environmental Radiochemistry, Boston,
MA, November 12, 1995

Shebell, P.

"*In Situ* Gamma-Ray Spectrometry: Past, Present, and Future"

1995 Canberra User's Group Meeting, Orlando, FL, April 1, 1995

Shebell, P.

"Analysis of Eighteen Years of Environmental Radiation Monitoring Data"

International Symposium on the Natural Radiation Environment VI, Montreal, Canada,
June 1, 1995

Shebell, P.

"DOE-EML Site Characterization Studies Using In Situ Spectrometry"

1995 Russian 3rd Environmental Remediation Course, Site Characterization Group,
Aiken, SC, June 5, 1995

Stevenson, K. A.

"Laboratory Update"

Nuclear Plant Program Conference, Air Force Technical Applications, Center, FL,
April 4, 1995

Stevenson, K. A.

"Invited talk: Site Characterization Demonstration: MAYAK Complex"

New York Chapter of the Health Physics Society, West Point, NY, May 8, 1995

Stevenson, K. A.

"Radionuclide Contaminant Characterization Studies in the Region of Chelybinsk-65
(Ozersk)"

Vallecitos Nuclear Center, CA, August 24, 1995

Stevenson, K. A.

"Results of the U. S. Radiometric Measurements Conducted During the September 1994 Joint Russian - U. S. Field Activities"

(Head of Delegation) HYDROSPETZGEOLOGIYA State Geologic Enterprise,
Moscow, Russia, September 19, 1995

Stevenson, K. A.

"Progress Report on the September 1994 Field Studies in the Territory of the MAYAK Production Facility, Russia"

Workshop of the Joint Coordinating Committee for Environmental Restoration and Waste Management (JCCEM), Washington, D.C., November 14, 1995

Tan, Y. L., A. Kong and M. A. Monetti

"Biogenic Polycyclic Aromatic Hydrocarbons in an Alaskan Arctic Lake Sediment"

15th International Symposium on Polycyclic Aromatic Compounds, Belgirate, Italy,
September 21, 1995

Tu, K. W., E. O. Knutson, A. R. Hutter and C. V. Gogolak

"Indoor Radon Progeny Aerosol Size Measurements in Pennsylvania"

AIHA 95, Kansas City, MO, May 22, 1995

Warren, S., V. Pan, P. Greenlaw and W. R. Newberry

"U. S. Department of Energy Radiological Laboratory Performance Evaluation Reports"

Environmental Remediation 1995 Conference, Denver, CO, August 15, 1995